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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,503	06/29/2001	Lawrence J. Ronk	TI-30890	9240
23494	7590	09/09/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			PATEL, KANJIBHAI B	
		ART UNIT		PAPER NUMBER
		2625		

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/896,503	RONK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kanji Patel	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 June 2005.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 5-7 is/are allowed.  
 6) Claim(s) 1-4 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 08 October 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

**Response to Amendment**

1. Applicant's amendment filed June 24, 2005 has been entered and made of record.

In response to applicant's persuasive arguments with respect to independent claim 5, the art rejection under 102(e) has been withdrawn and therefore, claim 5 and its dependent claims 6-7 are allowed.

However, the examiner has considered very carefully the applicant's other arguments with respect to claim 1 but they are not persuasive.

Applicant argues on page 4 of the remarks that the blocks in Saeki are for defining motion vectors between key frames and use the usual block matching for motion vectors and not grid block tracking.

The examiner disagrees. Saeki reference clearly describes the tracking or movement of the moving object (by giving an example of fish) and collection or storage of the features of the moving object as shown in Figs. 8-10 and described at column 7 line 36 to column 8 line 12 which is very similar to the example of a moving person as shown by the Applicant in Figs. 6-7 and described at pages 11-12 of the disclosure of the instant application. As shown in Fig. 7 of the instant application, a moving person is tracked and the viewing area is divided by using grid blocks and the grid blocks corresponding to the feature vectors are stored. In the similar way, in Saeki reference, fish is used as a moving object for tracking and the field of view is divided in grid blocks as shown in Figs. 8-10 and more specifically in Fig. 10. The movement of fish is shown by detecting the grid blocks as clearly shown by Figs. 9-10.

Applicant further argues that Saeki column 4, lines 39-60 describes the motion vector for a block in the first key frame but a "corresponding area" in the second key frame. This " corresponding area" typically is not a grid block because it does not align to the grid. These motion vectors of Saeki do not suggest the grid block motion described of claim 1.

Again the examiner disagrees with the applicants. Saeki clearly indicates as shown in Fig. 10 that block divider 51 of the motion detector unit 41 divides the **first and the corresponding second key frames 67(1) and 67(2) into blocks** of the first and second blocks arrangements 71(1) and 71(2) depicted along an upper row as explained at column 7 line 64 to column 8 line 12. Each block arrangement consists of 24x24 blocks, equal in number to the region data and each block consisting of four by four picture elements.

Thus the Saeki reference meets the claim limitations of grid blocks.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Sacki (US 5,969,772).**

**For claim 1,** Sacki discloses a method for video object feature data generation (figures 1-2), comprising:

(a) extracting a first set of features (column 2, lines 8-9; column 3, lines 23-54; step 33 in figure 1 detects a set of key frames 1 and 2 providing a set of features; see also in figure 8, a set of key frames 67-1 and 67-2 provides a set of features of the moving object fish) from a moving object (see column 2, lines 17-22; in Figure 8, fish provides a moving object) detected in a sequence of images (at least in figure 8, 65-1 to 65-6 provides images of the moving object fish)

(b) extracting a sequence of grid blocks (column 2, lines 9-11; block divider 51 in figure 2 provides grid blocks for detection of motion vector of the moving object; see also Figure 9; column 7, lines 54-63) corresponding to motion of said object (fish) in said sequence of images;

(c) storing said first set of features and said sequence of grid blocks (key memory 35 and motion vector memory 43 and region memory 39 in figure 1 provides a storage.

**For claim 2,** Sacki discloses the method wherein step (a) includes extracting features in every image in said sequence containing said object (step ST7 in figure 4; step S25 in figure 6);

**For claim 3,** Sacki discloses the method further comprising: extracting features and associating said grid-block extracted features with said grid block sequence images (figure 4).

**For claim 4,** Sacki discloses the method wherein said first set of extracted

features includes a color histogram ( 57 in figure 2; column 3, lines 26-35).

***Allowable Subject Matter***

3. **Claims 5-7** are allowed.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kanji Patel whose telephone number is (571) 272-7454. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kanji Patel  
Art Unit 2625  
9/3/05

  
**KANJIBHAI PATEL**  
**PRIMARY EXAMINER**